

Determining Jitter Buffer Size*Dynamic jitter buffers**Table B-1. Jitter buffer length (in milliseconds) for the G.711 audio codec (Page 2 of 2)*

Jitter^a buffer packets	Packet duration (ms), for one to 10 audio frames per RTP packet using the G.711 codec									
	1 frame @5ms	2 frames @10ms	3 frames @15ms	4 frames @20ms	5 frames @25ms	6 frames @30ms	7 frames @35ms	8 frames @40ms	9 frames @45ms	10 frames @50ms
3	15	30	45	60	75	90	105	120	135	150
4	20	40	60	80	100	120	140	160	180	200
5	25	50	75	100	125	150	175	200	225	250
6	30	60	90	120	150	180	210	240	270	300
7	35	70	105	140	175	210	245	280	315	350
8	40	80	120	160	200	240	280	320	360	400
9	45	90	135	180	225	270	315	360	405	450
10	50	100	150	200	250	300	350	400	450	500
11	55	110	165	220	275	330	385	440	495	550
12	60	120	180	240	300	360	420	480	540	600
13	65	130	195	260	325	390	455	520	585	650
14	70	140	210	280	350	420	490	560	630	700
15	75	150	225	300	375	450	525	600	675	750
16	80	160	240	320	400	480	560	640	720	800
17	85	170	255	340	425	510	595	680	765	850
18	90	180	270	360	450	540	630	720	810	900
19	95	190	285	380	475	570	665	760	855	950

a. This is the value entered for either initial-jitter-buffer-size and/or max-jitter-buffer-size.

Determining Jitter Buffer Size
Dynamic jitter buffers

Table B-2. Jitter buffer length (in milliseconds) for the G.729(A) audio codec

Jitter ^a buffer packets	Packet duration (ms), for one to 10 audio frames per RTP packet using the G.729(A) codec									
	1 frame @10ms	2 frames @20ms	3 frames @30ms	4 frames @40ms	5 frames @50ms	6 frames @60ms	7 frames @70ms	8 frames @80ms	9 frames @90ms	10 frames @100ms
1	10	20	30	40	50	60	70	80	90	100
2	20	40	60	80	100	120	140	160	180	200
3	30	60	90	120	150	180	210	240	270	300
4	40	80	120	160	200	240	280	320	360	400
5	50	100	150	200	250	300	350	400	450	500
6	60	120	180	240	300	360	420	480	540	600
7	70	140	210	280	350	420	490	560	630	700
8	80	160	240	320	400	480	560	640	720	800
9	90	180	270	360	450	540	630	720	810	900
10	100	200	300	400	500	600	700	800	900	1000
11	110	220	330	440	550	660	770	880	990	1100
12	120	240	360	480	600	720	840	960	1080	1200
13	130	260	390	520	650	780	910	1040	1170	1300
14	140	280	420	560	700	840	980	1120	1260	1400
15	150	300	450	600	750	900	1050	1200	1350	1500
16	160	320	480	640	800	960	1120	1280	1440	1600
17	170	340	510	680	850	1020	1190	1360	1530	1700
18	180	360	540	720	900	1080	1260	1440	1620	1800
19	190	380	570	760	950	1140	1330	1520	1710	1900

a. This is the value entered for either initial-jitter-buffer-size and/or max-jitter-buffer-size.

Determining Jitter Buffer Size*Dynamic jitter buffers**Table B-3. Jitter buffer length (in milliseconds) for the G.723.1 audio codec*

Jitter^a buffer packets	Packet duration (ms), for one to 10 audio frames per RTP packet using the G.723.1 codec									
	1 frame @30ms	2 frames @60ms	3 frames @90ms	4 frames @120ms	5 frames @150ms	6 frames @180ms	7 frames @210ms	8 frames @240ms	9 frames @270ms	10 frames @300ms
1	30	60	90	120	150	180	210	240	270	300
2	60	120	180	240	300	360	420	480	540	600
3	90	180	270	360	450	540	630	720	810	900
4	120	240	360	480	600	720	840	960	1080	1200
5	150	300	450	600	750	900	1050	1200	1350	1500
6	180	360	540	720	900	1080	1260	1440	1620	1800
7	210	420	630	840	1050	1260	1470	1680	1890	2100
8	240	480	720	960	1200	1440	1680	1920	2160	2400
9	270	540	810	1080	1350	1620	1890	2160	2430	2700
10	300	600	900	1200	1500	1800	2100	2400	2700	3000
11	330	660	990	1320	1650	1980	2310	2640	2970	3300
12	360	720	1080	1440	1800	2160	2520	2880	3240	3600
13	390	780	1170	1560	1950	2340	2730	3120	3510	3900
14	420	840	1260	1680	2100	2520	2940	3360	3780	4200
15	450	900	1350	1800	2250	2700	3150	3600	4050	4500
16	480	960	1440	1920	2400	2880	3360	3840	4320	4800
17	510	1020	1530	2040	2550	3060	3570	4080	4590	5100
18	540	1080	1620	2160	2700	3240	3780	4320	4860	5400
19	570	1140	1710	2280	2850	3420	3990	4540	5130	5700

a. This is the value entered for initial-jitter-buffer-size.

Determining Jitter Buffer Size
Dynamic jitter buffers

Table B-4. Jitter buffer length (in milliseconds) for the G.728 audio codec

Jitter ^a buffer packets	Packet duration (ms), for one to 10 audio frames per RTP packet using the G.728 codec									
	1 frame @5ms	2 frames @10ms	3 frames @15ms	4 frames @20ms	5 frames @25ms	6 frames @30ms	7 frames @35ms	8 frames @40ms	9 frames @45ms	10 frames @50ms
1	5	10	15	20	25	30	35	40	45	50
2	10	20	30	40	50	60	70	80	90	100
3	15	30	45	60	75	90	105	120	135	150
4	20	40	60	80	100	120	140	160	180	200
5	25	50	75	100	125	150	175	200	225	250
6	30	60	90	120	150	180	210	240	270	300
7	35	70	105	140	175	210	245	280	315	350
8	40	80	120	160	200	240	280	320	360	400
9	45	90	135	180	225	270	315	360	405	450
10	50	100	150	200	250	300	350	400	450	500
11	55	110	165	220	275	330	385	440	495	550
12	60	120	180	240	300	360	420	480	540	600
13	65	130	195	260	325	390	455	520	585	650
14	70	140	210	280	350	420	490	560	630	700
15	75	150	225	300	375	450	525	600	675	750
16	80	160	240	320	400	480	560	640	720	800
17	85	170	255	340	425	510	595	680	765	850
18	90	180	270	360	450	540	630	720	810	900
19	95	190	285	380	475	570	665	760	855	950

a. This is the value entered for initial-jitter-buffer-size.

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Lucent Technologies
Bell Labs Innovations



MAX TNT®

TAOS 9.1.9 Release Note

For software release 9.1.9
September 30, 2002

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Upgrade and downgrade procedures for TAOS 9.1.9
Requirements and recommendations

Upgrade and downgrade procedures for TAOS 9.1.9

This section shows how to upgrade and downgrade the TAOS software for a MAX TNT unit.

Requirements and recommendations

These recommendations for upgrading MAX TNT units help ensure a smooth upgrade. If you must downgrade from this release to a previous one, please see "Downgrade instructions" on page 5.

Memory requirement in TAOS 9.1.9

To upgrade to TAOS 9.1.9, your MAX TNT unit must be equipped with the 32MB flash card. Please contact your Lucent sales representative to purchase the 32MB flash card.

32MB JEDEC DRAM card required for this release

For this release, the MAX TNT requires a 32MB JEDEC DRAM card (model number TNT-SP-DRAM-32). New MAX TNT units now ship standard with the 32MB DRAM card.

The 32MB JEDEC DRAM card is not hot swappable. To install the card, you must turn off power to the MAX TNT, insert the card, and then turn on power to the MAX TNT. For additional information about the card, contact your sales representative.

Obtaining the TAOS 9.1.9 software

The MAX TNT TAOS 0.1.x software consists of the following files:

Filename	Descriptions
tntsrbb.bin	The boot loader. Both T1 and E1 loads use the same boot loader software. Install the appropriate boot loader for your software release when upgrading or downgrading.
tntrel1.tar and tntrel2.tar	Tar files (T1 load) that contain images for the shelf controller and all T1-compatible slot cards.
tntrele1.tar and tntrele2.tar	Tar files (E1 load) that contain images for the shelf controller and all E1-compatible slot cards.

If you need further assistance on obtaining the TAOS 9.1.9 software, see "Customer Service" on page iii.

To identify the software that you need based on the slot cards that have been physically installed in your chassis, refer to the following table. This table lists the contents of the tar files that contain the most commonly used slot-card images.

Minimally, you must load the first tar file (tntrel1.tar or tntrele1.tar). If your MAX TNT chassis contains additional slot cards (for example, a SWAN slot card), then you must also load the second tar file (tntrel2.tar or tntrele2.tar).

Upgrade and downgrade procedures for TAOS 9.1.9
Requirements and recommendations

Table 1 lists the contents of the MAX TNT TAOS 9.1.9 tar files.

Table 1. Tar file content description

Filename	Contents	
	Description	Slot-card images
tntrel.tar	Shelf controller	tntsr
	Ethernet	tntenet2 tntenet3 tntenet3nd
	HDLC	tnthdlc2 tnthdlc2ec
	T1-specific images	tnt8t1 tntt3 tntut1 tntpctfit
	MAX TNT modem images	tntcsmx tntcsm3v tntmdm56k
	MultiDSP	tntmadd
tntrel2.tar	STM-0	tntstm0
	UDS3	tntuds3
	DS3-ATM, DS3-ATM-2	tntds3atm tntds3atm2
	OC3-ATM	tntoc3atm tnt0c3atm2
	SWAN	tntswan tntswan2
	Analog modem	tntamdm
tntrele.tar	Shelf controller	tntsre
	Ethernet	tntenet2 tntenet3 tntenet3nd
	HDLC	tnthdlc2 tnthdlc2ec
	E1-specific images	tnt8e1 tntue1 tntpctfie
	MAX TNT modem images	tntcsmx tntcsm3v tntmdm56k
	MultiDSP	tntmadd
tntrele2.tar	E3-ATM	tnte3atm
	OC3-ATM	tntoc3atm tnt0c3atm2
	SWAN	tntswan tntswan2
	Analog modem	tntamdm

Local access to the unit recommended

Whenever you install system software, Lucent recommends that you access the unit through the shelf controller serial or LAN port rather than a slot card port.

If your unit is configured with DNIS and CLID passwords, after upgrading from TAOS 8.x to TAOS 9.x, the unit no longer recognizes the `dnis-password` and `clid-password` values that were set in prior releases, and dial-in users might experience a busy tone.

Upgrade and downgrade procedures for TAOS 9.1.9
Upgrade instructions

Saving the system configuration

As a general practice, always save the system configuration before upgrading or downgrading system software. If you use TFTP to save the system configuration, the target file must exist on the TFTP server and you must have permission to write it. For example, the following commands executed on a TFTP server create a target file and set its permissions:

```
$ touch /tftpboot/config/testcfg.1
$ chmod a=rw /tftpboot/config/testcfg.1
```

Before you save the system configuration, you must enable the allow-password permission in the User profile to save the configured passwords. If you do not have allow-password permission enabled, you are prompted to confirm that you wish to save the configuration without passwords. If you do so and then restore the saved configuration, all passwords in the configuration are wiped out. The following commands executed on the MAX TNT unit save the system's configuration to the target file on the TFTP server and then restore the saved configuration:

```
admin> save network 10.10.10.10 config/testcfg.1
admin> load config network 10.10.10.10 config/testcfg.1
```

Note: For additional information about the save command and its options, see the *APX 8000/MAX TNT/DSLNT Reference*.

Upgrade instructions

These instructions show how to upgrade to TAOS 9.1.9 from TAOS version 8.0.x or later. If you are not sure which version the system is running, enter the *version* command. For example:

```
admin> version
Software version 8.0.5
```

Note: Under certain conditions, the *load tar* command might not recognize the slot cards and load only the shelf controller image during the upgrade procedure. If this occurs, reset the system and load the tar file again. The second *load tar* command will load the appropriate slot-card images for the system.

Before you begin upgrading

Before upgrading a standalone or multishelf unit, follow these preliminary steps:

- 1 Log into the system and save its configuration to a TFTP server. This step is optional but strongly recommended. For details, see "Saving the system configuration" on page 3.
- 2 Verify that the *load-select* profile is configured either to automatically load only required binaries or to load only selected binaries.

Upgrading a standalone MAX TNT unit

Note: The following steps are order sensitive. To help ensure a smooth upgrade, first perform the preliminary upgrade steps described in the preceding section, and then perform the following steps in the order in which they are shown.

Upgrade and downgrade procedures for TAOS 9.1.9

Upgrade instructions

To upgrade a standalone unit, proceed as follows:

- 1 Format the flash card (optional). For example:

```
admin> format flash-card-1
```

- 2 Load the boot loader. For example:

```
admin> load boot-sr network 10.10.10.10 tntsrb.bin
```

Note: If you upgrade from TAOS 9.0.x or higher, continue with step 4. Otherwise, continue with step 3.

- 3 Load the tar file. For example:

```
admin> load tar network 10.10.10.10 tntrel.tar
```

Note: Skip step 4.

- 4 Load the tar file. For example:

```
admin> load tar network 10.10.10.10 tntrel.tar tntrel2.tar
```

- 5 Restore the system configuration file (optional). For example:

```
admin> load config network 10.10.10.10 /tftpboot/config/testcfg
```

- 6 Reset the system as follows:

```
admin> reset
```

Note: The dnis-password parameter in the password-profile subprofile of the EXTERNAL-AUTH profile has been changed to DNIS.

Upgrading a multishelf MAX TNT unit

Note: For multishelf systems, the master shelf and each slave shelf must have a 32MB JEDEC DRAM card (model number TNT-SP-DRAM-32).

Note: MultiVoice® is not supported on multishelf systems.

If you are upgrading a multishelf system, you must load the new boot loader to the slave shelves by using the Loadslave command. (The version of the `tntsrb.bin` file on the master shelf must match the `tntsrb.bin` version on the slave shelves. Otherwise, the slave shelves cannot load code from the master shelf.) In addition, you must load a link to a redundant image of the tar file located in onboard flash.

The following steps are order sensitive. To help ensure a smooth upgrade, first perform the preliminary steps described in "Before you begin upgrading" on page 3, and then perform the following steps in the order in which they are shown:

- 1 Format the flash card (optional). For example:

```
admin> format flash-card-1
```

- 2 Load the boot loader. For example:

```
admin> load boot-sr network 10.10.10.10 tntsrb.bin
```

- 3 Load the new boot loader to the slave shelves. For example, the following command loads the boot loader to a slave shelf with a rotary-switch setting of 2:

```
admin> loadslave 2 boot-sr
```

Note: If you are upgrading from TAOS 9.0.x or higher, skip step 4 and continue to step 5.

Upgrade and downgrade procedures for TAOS 9.1.9
Downgrade instructions

-
- 4 Load the tar file. For example:

```
admin> load tar network 10.10.10.10 tntrel.tar
```

Note: Skip step 5 and continue with step 6.
 - 5 Load the tar file. For example:

```
admin> load tar network 10.10.10.10 tntrel.tar tntrel2.tar
```
 - 6 Use the Loadslave command to load a link to the image2 file, which is a redundant compressed image of the binary in the NVRAM. For example, the following command loads the image to a slave shelf with a rotary-switch setting of 2:

```
admin> loadslave 2 image2
```
 - 7 Restore the system configuration file (optional). For example:

```
admin> load config network 10.10.10.10 /tftpboot/config/testcfg
```
 - 8 Reset the system, as follows:

```
admin> reset -a
```

Downgrade instructions

Because releases are not necessarily backward compatible, Lucent recommends that you always restore a backup configuration made under the previous version or one of its predecessors.

Note: If you must downgrade, you must have serial access to the MAX TNT. See the previous *MAX TNT TAOS 9.0 Release Notes* at
<http://www.lucent.com/support/documentation.html>.

Downgrading a standalone MAX TNT unit

To restore a previous software version (prior to TAOS 9.1.9), proceed as follows:

- 1 Format the flash card. For example:

```
admin> format flash-card-1
```
- 2 Load the previous version of the boot loader. For example:

```
admin> load boot-sr network 10.10.10.10 tntsrb.bin
```

Note: If downgrading to a previous software version prior to 9.0.x, continue with step 3. Otherwise, continue with step 4.
- 3 Load the previous version of the tar file. For example, to load via TFTP from a local host:

```
admin> load tar network 10.10.10.10 tntrel.tar
```

Note: Skip step 4 and continue with step 5.
- 4 Load the previous version of the tar file files.

```
admin> load tar network tntrel.tar tntrel2.tar
```
- 5 Clear all profiles by entering the nvram command. For example:

```
admin> nvram
```

Upgrade and downgrade procedures for TAOS 9.1.9*Downgrade instructions*

-
- 6 Log into the system via the serial connection. Open the IP-Interface profile for the shelf controller and set the address. For example:

```
admin> read ip-interface { { 1 controller 1 } 0 }
IP-INTERFACE/{ { shelf-1 controller 1 } 0 } read
admin> set ip-address = 10.10.10.2/24
admin> write
IP-INTERFACE/{ { shelf-1 controller 1 } 0 } written
```

- 7 Load a backup configuration made under the restored software version or one of its predecessors. For example:

```
admin> load config network 10.10.10.10 config/801-config
```

- 8 Reset the system. This step is required. For example:

```
admin> reset
```

Downgrading a multishelf MAX TNT unit

If you are downgrading a multishelf system, you must load the restored boot loader to the slave shelves by using the Loadslave command. (The version of the `tntsrbin` file on the master shelf must match the `tntsrbin` version on the slave shelves. Otherwise, the slave shelves cannot load code from the master shelf.) In addition, you must load a link to a redundant image of the restored tar file. To downgrade a multishelf unit, proceed as follows:

- 1 Format the flash card. For example:

```
admin> format flash-card-1
```

- 2 Load the boot loader. For example:

```
admin> load boot-sr network 10.10.10.10 tntsrbin
```

- 3 Load the new boot loader to the slave shelves. For example, the following command loads the boot loader to a slave shelf with a rotary-switch setting of 2:

```
admin> loadslave 2 boot-sr
```

Note: If you are downgrading to a TAOS version prior to 9.0.x, continue with step 4. Otherwise, continue with step 5.

- 4 Load the tar file. For example:

```
admin> load tar network 10.10.10.10 tntrel.tar
```

Note: Skip step 5 and continue with step 6.

- 5 Load the tar files. For example:

```
admin> load tar network 10.10.10.10 tntrel.tar tntrel2.tar
```

- 6 Use the Loadslave command to load a link to the `image2` file, which is a compressed image of the binary in the NVRAM. For example, the following command loads the image to a slave shelf with a rotary-switch setting of 2:

```
admin> loadslave 2 image2
```

- 7 Clear all profiles by entering the `nvram` command. For example:

```
admin> nvram
```

Upgrade and downgrade procedures for TAOS 9.1.9
Downgrade instructions

-
- 8 Log into the system (master shelf) via the serial connection. Open the IP-Interface profile for the shelf controller and set the IP address. For example:

```
admin> read ip-interface { { 1 controller 1 } 0 }
IP-INTERFACE/{ { shelf-1 controller 1 } 0 } read
admin> set ip-address = 10.10.10.2/24
admin> write
IP-INTERFACE/{ { shelf-1 controller 1 } 0 } written
```

- 9 Load a backup configuration made under the restored software version or one of its predecessors. For example:

```
admin> load config network 10.10.10.10 /tftpboot/config/801-
config
```

Note: Steps 10 and 11 are required and are order sensitive.

- 10 To enable the shelf controller as master shelf, reset the system as follows:

```
admin> reset
```

- 11 To enable the system as a multishelf system, reset the system as follows:

```
admin> reset -a
```

TAOS 9.1.9 enhancements and corrections
TAOS 9.1.9 enhancements

TAOS 9.1.9 enhancements and corrections

TAOS 9.1.9 introduced new enhancements and corrected certain problems from the previous release.

TAOS 9.1.9 enhancements

TAOS 9.1.9 includes the following enhancements.

Improved POST diagnostics for slot cards

The power-on and self test (POST) logic has been improved. Slot cards that pass POST with previous software releases might now be declared defective.

Firmware versions for digital modem cards

The Mindspeed (formerly known as Conexant) firmware versions for the MAX TNT Digital Modem slot cards include support for V.90, K56flex, K56plus, and all slower, standard modem speeds. This release includes the following Mindspeed firmware:

- Series56 Digital Modem slot cards (also called CSM/1, TNT-SL-48MOD-S56) support V2.0982-K56_DLP_CSM firmware.
- Series56 II Digital Modem slot cards (also called CSM/3, TNT-SL-48MOD-SGL and TNT-SL-48MOD-S-C) support V5.817 firmware.
- Series56 III Digital Modem slot cards (also called CSMV/3, TNT-SL-48MODV3-S-C) support V5.8175 firmware.

Firmware versions for MultiDSP cards

TAOS 9.1.9 includes the following Lucent firmware versions for the MAX TNT MultiDSP slot cards:

- 48-port MultiDSP slot cards (TNTP-SL-ADI-C or TNTV-SL-ADI-C) support Controller V0.1.71, Modem DSP V0.1909.0, and VoIP DSP V3.0.52 Lucent firmware.
- 96-port MultiDSP slot cards (APX8-SL-96DSP) support Controller V0.1.71, Modem DSP V0.1909.0, and VoIP DSP V3.0.52 Lucent firmware.

TAOS 9.1.9 corrections

Table 2 lists the change requests (CR) identification numbers and the problems corrected in TAOS 9.1.9.

Table 2. Change request ID numbers and problems corrected in TAOS 9.1.9

CR ID	Problem corrected
6002416	TAOS units sent some periodical accounting records to the RADIUS server even when the acct-sess-interval parameter was set to 0.
7006834	Ethernet-2 slot cards rebooted with a Warning 179 message and no fatal errors.

TAOS 9.1.9 enhancements and corrections**TAOS 9.1.9 corrections***Table 2. Change request ID numbers and problems corrected in TAOS 9.1.9 (continued)*

CR ID	Problem corrected
7006963	The TAOS unit was receiving FE36 resets on the 96-port MultiDSP modem card upon upgrade to the current software.
7007016	Binary FTP client downloads were hanging when a call was established with a Nokia mobile phone using V.120 Point-to-Point Protocol (PPP) and a user rate of 19.2 or 28.8Kbps. The problem occurred after 8 to 12 Kb of data was transferred from a CSM3/V or HDLC2 slot card to the client (client download or get).
7007103	The HDLC2 and Ethernet-2 slot cards reset daily with FE42. Warning messages 179 and 104 were also logged.
7007108	Approximately half of TAOS units with Ethernet-2 slot cards were experiencing index 95 (Card bounced, timeout failure).
7007110	On the Ethernet-3ND slot card, the SNMP agent incorrectly populated RFC 2233 MIB objects. The Ethernet-3ND was also inconsistent with Ether-3 and Ethernet-2 slot cards.
7007138	TAOS units forwarded the Hot Standby Routing Protocol (HSRP) multicast packet with the source IP address as the Cisco IP address.
7007140	After rebooting, the TAOS unit received the following fatal error three times before the system came up: <code>Shelf-Controller FE36: _gmonTextCount + 0.</code>
7007150	The TAOS unit missed some autonomous system external linked state advertisements (LSAs) in the Open Shortest Path First (OSPF) database that were present in OSPF routing table
7007153	The <code>call-log-key</code> and <code>shared-secret</code> were still visible when <code>allow-password</code> was set to no.
7007186	When downing E1 slot (using the <code>slot -d</code> command), the Access SS7 Gateway Control Protocol (ASGCP) message was not sent to the ASG.
7007216	After a PPP session was established, Sharp's Picwalk SH712m PHS mobile phones with terminated web browser PPP PIAFs calls sent a DNS query to the DNS server. Approximately half of the time the TAOS unit did not forward the first DNS response packet back to the PIAFs terminal when the remote address was assigned from an IP pool and the call went through Ethernet-3ND slot card.
7007221	Data Filters were not being applied when Dialed Number Information Service (DNIS) authentication was used on Remote Authentication Dial-In User Service (RADIUS).
7007267	A Login-User with a RADIUS profile failed a Telnet session after 5 seconds.
7007278	The SNMP trap received from the TAOS unit was posted as the wrong data type (Wrong type: should be Counter32).
7007280	The TAOS unit sent an SNMP trap to network management system (NMS) when its configuration was changed, but the trap reported Admin or NULL instead of the actual username of the person making the configuration change.

TAOS 9.1.9 enhancements and corrections
TAOS 9.1.9 corrections

Table 2. Change request ID numbers and problems corrected in TAOS 9.1.9 (continued)

CR ID	Problem corrected
7007315	There was either a mismatch in the management information base (MIB) between the interface index of the soft IP address reported in the <code>ipAddrTable</code> and in the <code>ifTable</code> , or the interface index of the soft IP address reported in these tables was the same. This impacted the way the TAOS unit was discovered in network management software, and prevented correct supervision of the network access server in HP OpenView.
7007351	TAOS units rejected incoming V.120 calls at the Integrated Digital Services Network (ISDN) when incoming Q.931 setup messages contained logical link control (LLC) information and V.120 bearer capability. The call was not routed to a modem card, and was released on the E1 slot card with an <code>Incompatible Destination</code> message.
7007356	Fragmented 1500 byte packets were incorrectly compressed with MS-STACK and Microsoft Point-to-Point Compression (MPPC).
7007385	FTP sessions over Microsoft Point-to-Point Compression (MPPC) froze on both Win98SE and Win2k at approximately 99% during an <code>ftp get</code> transfer.
7007388	The Layer 2 Tunneling Protocol (L2TP) user name length was limited to 31 characters when using the L2TP access concentrator (LAC) Proxy Link Control Protocol (LCP).
7007391	A terminal server Point-to-Point Protocol (PPP) delay was applied to V.120 and X.75 asynchronous calls when Dial Number Information Service (DNIS) pre-authentication and an immediate service, such as Raw Transport Control Protocol (TCP), was used.
7007407	There was a V.92 connection problem with Zoom serial modems.
7007499	When users connected to a BZ5000 switch placed a VoIP call to a TAOS unit, they did not receive a voice announcement. The voice announcement was sent from the TAOS unit to the switch, but the switch was unable to pass it on to the user because the extension bit (bit 8) of the third octet needed to be set to 1 and the TAOS unit was sending a value of 0.
7007523	The Courier Modem I did not work with V.34 emulation.
7007527	TAOS unit either corrupted or duplicated tones received at the egress gateway. In traces, PIN tones were received in altered form and propagated to the switch.
7007534	Microsoft Challenge Handshake Authentication Protocol (MS-CHAP) V1 authentication via RADIUS failed.
7007535	When an IP TCP SYN packet was sent to an unreachable TCP port (for example, port 80) on the open virtual router interface or system address, the TCP RST ACK reply packet was sent by the TAOS unit originating from the main router interface.
7007555	The T3 slot card crashing with FE18 and shut down the quadrant.
7007586	Data link connection identifier (DLCI) backup did not work when Frame Relay Direct was used.
N/A	A <code>sysConfigChangeTrap</code> (30) was not sent when the configuration was modified using the Simple Network Management Protocol (SNMP).

TAOS 9.1.8 enhancements and corrections
TAOS 9.1.8 enhancements

TAOS 9.1.8 enhancements and corrections

TAOS 9.1.8 introduced new enhancements and corrected certain problems from the previous release.

TAOS 9.1.8 enhancements

TAOS 9.1.8 includes the following enhancements.

Improved POST diagnostics for slot cards

The power-on and self test (POST) logic has been improved. Slot cards that pass POST with previous software releases might now be declared defective.

Firmware versions for digital modem cards

The Mindspeed (formerly known as Conexant) firmware versions for the MAX TNT Digital Modem slot cards include support for V.90, K56flex, K56plus, and all slower, standard modem speeds. This release includes the following Mindspeed firmware:

- Series56 Digital Modem slot cards (also called CSM/1, TNT-SL-48MOD-S56) support V2.0982-K56_DLP_CSM firmware.
- Series56 II Digital Modem slot cards (also called CSM/3, TNT-SL-48MOD-SGL and TNT-SL-48MOD-S-C) support V5.817 firmware.
- Series56 III Digital Modem slot cards (also called CSMV/3, TNT-SL-48MODV3-S-C) support V5.8175 firmware.

Firmware versions for MultiDSP cards

This release includes the following Lucent firmware versions for the MAX TNT MultiDSP slot cards:

- 48-port MultiDSP slot cards (TNTP-SL-ADI-C or TNTV-SL-ADI-C) support Controller V0.1.69, Modem DSP V0.1908.0, and VoIP DSP V3.6.2 Lucent firmware.
- 96-port MultiDSP slot cards (APX8-SL-96DSP) support Controller V0.1.69, Modem DSP V0.1908.0, and VoIP DSP V3.6.2 Lucent firmware.

TAOS 9.1.8 corrections

Table 3 lists the change requests (CR) identification numbers and the problems corrected in TAOS 9.1.8.

Table 3. Change request ID numbers and problems corrected in TAOS 9.1.8

CR ID	Problem corrected
N/A	ATMP: when the HA-HR connection was MP or MPP, only one channel worked.